

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Toshihiko OGURA

Application No.: 10/639,463

Filed: August 13, 2003

Docket No.: 110519.01

For: HEART-SOUND DETECTING APPARATUS AND HEART-SOUND DETECTING  
METHOD

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. English-language Abstracts of the non-English language references are attached for JP-A-2-203869 and JP-63-293424.
- ☒ 3. A concise explanation of the relevance of the non-English language reference appears in the Appendix attached hereto.

- ☒ 4 A computer-generated English translation of the following Japanese Patent Publication has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See Reference JP-B2 2877950 and JP-A 10-295657.

Respectfully submitted,



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Date: December 16, 2003

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**DEPOSIT ACCOUNT USE  
AUTHORIZATION**

Please grant any extension  
necessary for entry;

Charge any fee due to our  
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## **APPENDIX**

### **1) JP-A 2-203869**

This document relates to an electric stimulating device including a detecting means for detecting a time phase corresponding to a cardiac pulsation; and an output means for outputting an electric stimulation in synchronism with the detected time phase.

### **2) JP-U 8-675**

This document relates to an electric stimulating device including a pulse wave detecting means for detecting a pulse wave signal from a person; an output means for detecting a diastolic phase from the pulse wave signal detected by the pulse wave detecting means, and outputting an electric stimulus in synchronism with the detected diastolic phase; and a conductor for outputting the electric stimulus pulse outputted by the output means, to the person.

### **3) Circulatory-Organ Function Test (Chapter 18)**

This document relates to a method of testing circulatory-organ function by using a phonocardiogram and a supersonic wave.

### **4) JP-A 63-293424**

This document relates to a pulse wave detecting device including a plurality of pressure sensing elements that are adapted to be placed on an artery of a person via the skin, and a selecting means for selecting one of the pressure sensing elements that is positioned at a position right above the center of the artery.

### **5) JP-A 1-502001 (& WO88/05283)**

This document relates to a blood pressure monitor including an array of pressure sensing elements that are adapted to be placed on an artery of a person via the skin, and a selecting means for selecting one of the pressure sensing elements that is positioned at a position right above the center of the artery.

### **6) JP-A 52-108684**

This document relates to an aortic-pulse-wave velocity measuring device for measuring an aortic-pulse-wave velocity by utilizing a phonocardiogram.

7) JP-A 62-27922

This document relates to an automatic blood pressure measuring device for automatically measuring a blood pressure by using a pulse-wave sensor provided on an inner surface of an inflatable cuff.

8) JP-U 60-10667

This document relates to a carotid-pulse-wave detecting device for detecting a carotid pulse wave.

9) JP-A 52-146987

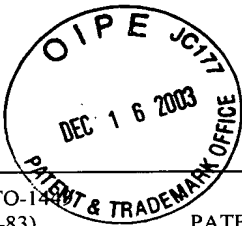
This document relates to a digital-type pulse-wave propagation velocity measuring device. This device includes an electrocardiograph (ECG), measures a propagation time needed for a pulse wave to propagate between two portions of a person, and a length between the two portions, and determines a pulse-wave propagation velocity based on the measured propagation time and the measured length.

10) JP-B2 2877950

This document relates to a blood-circulation- information displaying device including a sound-wave detecting portion for detecting Korotkoff sounds.

11) JP-A 10-295657

This document relates to a blood-pressure measuring device for measuring a blood pressure by detecting a pulse wave.

Sheet 1 of 1

Form PTO-1440 (REV. 8-83)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 110519.01		APPLICATION NO. 10/639,463	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				APPLICANT(S) Toshihiko OGURA			
				FILING DATE August 13, 2003		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
		JP-A-2-203869 (w/English Abstract)	08/13/90	JAPAN			
		JP-U-8-675	04/23/96	JAPAN			
		JP-63-293424 (w/English Abstract)	11/30/88	JAPAN			
		JP-A-1-50201	07/13/89	JAPAN			
		WO 88/05283	07/28/88	WIPO			
		JP-A-52-108684	09/12/77	JAPAN			
		JP-A-62-27922	02/05/87	JAPAN			
		JP-U-60-106607	07/20/85	JAPAN			
		JP-A-52-146987	12/07/77	JAPAN			
		JP-B2-2877950 (w/English Translation)	01/22/99	JAPAN			
		JP-A-10-295657 (w/English Translation)	11/10/98	JAPAN			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
		Circulatory-Organ Function Test (Chapter 18); Froelicher et al.; Cardiac Disease; Year Book Med. Publ., Inc.; 1986; pp. 1508-1511.					
EXAMINER					DATE CONSIDERED		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Date: December 16, 2003